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DEVELOPMENT OF THE BASS-KLAUSS IMPACT
MODEL OF INTERPERSONAL COMMUNICATION

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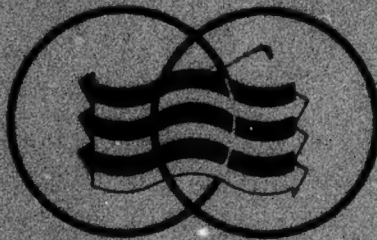SYRACUSE, NEW YORK

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DEVELOPMENT OF THE BASS-KLAUSS IMPACT
MODEL OF INTERPERSONAL COMMUNICATION

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MAXWELL TRAINING AND DEVELOPMENT PROGRAMS

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(IV) careful listening, (V) brevity and (VI) informality. A 25 item inventory yields six factor scores with reliabilities of .76 or higher. Seven other factored scales generate equally reliable measures of credibility, role clarity and impact.

ii

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iii

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iv

DEVELOPMENT OF THE BASS-KLAUSS IMPACT
MODEL OF INTERPERSONAL COMMUNICATION

> Communications are central phenomena in
> organizations. . . In addition to serving as the
> matrix which links members together in organiza-
> tions. . . the communication system serves as the
> vehicle by which organizations are embedded in
> their environments. The inputs and outputs of
> organizations are mediated through communications.
> (Guetzkow, 1965)

This view of the importance of communication in organizations is

widely shared by researchers and practitioners. For example, many

years ago Barnard suggested that "in an exhaustive theory of organ-

ization, communication would occupy a central place, because the

structure, extensiveness, and scope of organization are almost entirely

determined by communication techniques" (1938, p. 91). Elsewhere,

communication has been called the "cement" which makes an organization

(Wiener, 1955), and "the very essence" of an organization (Katz and

Kahn, 1966).

Despite the widespread agreement concerning the importance of

communication within organizations, an understanding of how it actually

operates in such settings remains quite limited. Perhaps, part of the

reason is that communication is an issue of concern in a number of

well-established disciplines such as sociology, linguistics, psychology,

physiology, economics, speech, marketing, information science, etc.

Each discipline tends to take its own specific focus on the problem,

develop its own terminology and operationalize measures from that

perspective--with relatively little attention given to what is being done in other disciplines to address the same issue (Cherry, 1967; Thayer, 1967). Hence, the occasion for "communicating" and building on the learnings coming from within each discipline is typically not capitalized upon. Another problem in studying communication is that since it is such a pervasive feature of organizations, it is hard to isolate as a separate phenomenon for investigation (Porter and Roberts, 1972). Whatever the reasons, the need for empirical research which focuses on the core area of communication within organizations remains very great.

Focus of Present Research

The research effort reported here addresses this general need for empirical research on organizational communication, and focuses on a particularly vital area, namely, interpersonal communication at the managerial level. Given this focus of interest, we need to briefly discuss what we mean by the term "interpersonal communication." Perhaps most central to our definition is the view that interpersonal communication is essentially a social affair, an ongoing process involving at least two persons in interaction with each other. This process involves the exchange of messages which have content and meaning, and the primary concern in this present research is with the manner in which these messages are transmitted by a sender and given meaning by a recipient.

This perspective on communication as an interpersonal exchange process

finds support in the work of a number of researchers (Barnlund, 1968; Cherry, 1967; Newcomb, 1953; Patton and Giffin, 1974; Berlo, 1960), and it gives clear recognition to the fact that communication is an ongoing, organic, dynamic activity which is not frozen in time or unidirectional in flow. It also suggests that communication behaviors of a person (for example, supervisor) can be seen to influence others' (for example, subordinates) actions and attitudes.

A variety of different approaches might be taken in studying interpersonal communication in organizational settings. For example, one might choose to examine the structure of communication networks, the impact of different communication channels (face to face, telephone, written message), or directionality of communication (horizontal, upward, downward, diagonal). These as well as other approaches have to some extent been investigated by researchers in the field, and they have provided some tentative and useful insight into the communication process as it operates in organizations. However, for purposes of this current research effort we will be addressing a very specific area of concern -- verbal communication at the managerial level in work organizations.

Our choice of focus is based on the view that managerial communication is probably one of the most critical areas of organizational communication in general, and that it is the point at which managerial behavior can genuinely "make a difference" in influencing performance and employee attitudes. And if we consider the amount of time spent on communication on the part of managers, the empirical evidence clearly indicates that its centrality to the manager's overall job cannot be denied. For example, in 1951, Carlson conducted an intensive study of

nine senior executives over a four-week period of time and found that these senior managers spent approximately 80 percent of their time talking with others. In another intensive study of four departmental-level managers, Burns (1954) also found that more than 80 percent of these managers' time was spent in conversation. More recently, Stewart (1967), Lawler, Porter and Tennenbaum (1968) as well as Mintzberg (1968) have also found that an overwhelming amount of a manager's time is consumed by interpersonal communications.

Thus as these above studies indicate, interpersonal communication processes at the managerial level are of central importance. However, these studies reveal very little about specific managerial behaviors which contribute to effective communication. There has been some research in the fields of mass communication, psycholinguistics, attitude change and small group behavior relevant to interpersonal processes, but to a large extent these efforts have bypassed the reality constraints of enduring organizational relationships and the immediate managerial work environment. That is, most of this research has been conducted in a laboratory research context using artificialy created groups (often with college students as subjects), or with groups having brief life spans (for example, duration of an experiment) -- conditions far different from most real-world organizations.

Representative of such research is the work of Bavelas and Barrett (1951), Leavitt (1951), Shaw (1964), Lawson (1965) and Burgess (1969). As suggested above, however, these studies are limited by the fact that they involved tasks which are not representative of real-world work situations. Moreover, they usually have tapped only one or two characteristics of interpersonal communication (such as amount and/or direction

of flow) at a time in relation to performance or satisfaction. Other
potential dimensions of interpersonal communication behavior and their
relation to performance and effectiveness in work organization have for
the most part not been probed.

While laboratory research in this area has a number of limitations,
the research conducted in field settings also has some deficiencies. In
particular, most of the field research to date has not focused directly
on the extent to which communication behavior is related to key variables
of performance and satisfaction. Exceptions to this pattern can be
noted in the work of Indik, Georgopoulos and Seashore (1961), and more
recently in research reported by Roberts and O'Reilly (1974, 1975, 1976).

To summarize the foregoing discussion, the literature to date
suggests first of all that interpersonal communication is a central
phenomenon in organizations and secondly that it is especially important
at the managerial level. Certainly, it occupies a vast majority of a
manager's time and thus any increase in a manager's effectiveness or
skill as a communicator should contribute directly or indirectly to
increased organizational performance. The current state of knowledge in
this area, however, is relatively fragmented, especially in terms of
understanding specific behaviors that characterize interpersonal
communication and the contribution which effective interpersonal commu-
nication can make to improving individual and organizational performance.
In the research outline which follows we will be focusing on these
issues and propose a framework for understanding the impact of managerial
communication behavior in ongoing work organizations. It is hoped that
this effort will make a contribution toward filling some of the gap that

currently exists in this area of organizational activity, and in turn contribute to the eventual development of a contingency theory of interpersonal organizational communication that would suggest appropriate communication behaviors for given work contexts. In attempting to move in this direction we turn now to a brief review of the existing literature and research to see what efforts and findings have been made in this field.

Previous Research and Perspectives

The literature on communication in organizations is quite extensive, but a large part of it turns out to be practitioner-oriented articles and books which give hints on how to be an effective communicator or improve organization communication. The more systematic, theoretical and empirically based writing and research in this area is surprisingly less voluminous than one might expect. Roberts and O'Reilly (1974) point out, for example, that in the area of job satisfaction, over 4,000 investigations have been reported (Lawler, 1971), while in contrast Porter and Roberts (1972) suggest that some 22 studies constitute the bulk of the research reported to 1972 in the area of organizational communication. This discrepancy in numbers makes clear the lack of attention being given to this field. More discouraging, however, is the fact that the amount of research on communication in organizations, if anything, has even fallen off further in the past several years. A comparison of Guetzkow's 1965 review of the literature with Porter and Roberts (1972) conveys this message quite dramatically, and the research reported since 1972 has not picked up much--with a few notable exceptions such as the work being carried on by Roberts and colleagues.

In the discussion which follows we will briefly summarize some
of the major dimensions of research in this field to date. (For a more
extensive coverage of this research, the reader is referred to the
review articles of Guetzkow (1965), Barnlund (1968), Thayer (1967),
Porter and Roberts (1972), and Roberts, O'Reilly, Bretton and Porter
(1974). We will approach this discussion by first looking at the
organization theory literature to see what has been said about commu-
nication from that perspective. Then we will turn to some of the various
models which have been developed to describe and analyze communication
processes in organization settings. Finally, we will summarize some of
the empirical research which has been reported in an attempt to bring us
up to date on the current "state of the art" in this field.

Organization Theory Perspective

> Theories are nets cast to catch what we call
> 'the world': to rationalize, to explain, and to
> master it. We endeavor to make the mesh ever
> finer and finer (Popper, 1959).

As the above quotation suggests, theories are developed in an
attempt to capture the basic essence of that part of "reality" which is
of concern to the researcher/theory builder. In a generic sense, the
basic purpose of theory building then is to develop the capability to
explain and predict. In the case of organization theory, this implies
an ability to explain existing organization behavior, predict future
organization behavior, as well as presumably be able to influence
future organization behavior in selected ways. However, when one
examines the current state of organization theory, it must be concluded
that our capacity to explain, let alone predict, organization behavior is

still very limited. In terms of Karl Popper's above commentary on
theories, one might say that we are still trying to agree on exactly
where to direct the casting of our net, and beyond that the size of
the mesh is so large that a good deal of the essence continues to slip
through and escape our theoretical net. Hence, our ability to explain
and predict organization behavior is indeed in a state of infancy.

Having made this general observation, it is still instructive to take
a brief look at the organization theory literature to see what attention
has been given to the issue of organizational communication. In examining
this literature we will distinguish four general categories of develop-
ment: classical theory; neoclassical-human relations approach; behavioral
decision theory; so-called modern organization theory.

The more traditional classical organization theory focuses primarily
on the structuring/division of work and work units in organizations.
Representative of one strand of this approach is the work of Taylor (1911)
who was especially concerned with "scientific" ways of organizing work
so that workers could more efficiently carry out their assigned respon-
sibilities. Management's role was to establish efficient procedures,
regulations, etc. which would specify exactly what and how workers were
to do their job. Rigid adherence to such scientifically developed pro-
cedures was seen as the key to higher production. Hence, man became an
extension of the machinery and technology around him, and the intent was
to make him as efficient as possible in working with that machinery.
From this point of view, organizational communication per se has no
immediate place and might best be seen in terms of a formalized system

for relaying messages (directions, instructions, etc.) in a <u>downward</u> direction from manager to subordinate with no concern for upward feedback.

A second strand of classical organization theory has focused on issues of departmentalization--looking at how to formally structure the total organization into departmental units and sub-units to effectively get the job done. Thus, whereas Taylor's work was directed more at the individual worker level and with the physiological determinants of worker efficiency, this second strand, sometimes labeled administrative management theory, pays more attention to the problem of allocating and grouping task activities into work units which in turn could be structurally linked to each other through formalized chains of command. Of primary concern from this perspective have been issues such as the division of labor, scalar and functional processes, structure, and span of control. Representative of this approach is the writing of Fayol (1949), Weber (1947), Mooney and Reiley (1939), and Gulick and Urwick (1937). To the extent communication is dealt with in this literature, it is seen in terms of flowing in the formalized channels which exist in the formal structure of the organization. Emphasis is given to downward communication to deal with issues of authority, delegation of responsibility, coordination, and control. For the most part, the level of analysis is macro, and the basic principles outlined in these writings are so broad that the specific implications for understanding organizational communication, especially at the interpersonal level, are ignored. Thus, very little direction for developing a theoretical base to understand organizational communication is provided in this set of literature.

A subsequent phase in the evolution of organization theory literature, labeled by some as the human relations movement, attempts to compensate for some of the weaknesses in the classical theories by building in the focus of human behavioral concerns. Whereas the classical theorists were primarily concerned with the formal structuring of work and of the organization, the neoclassical writers pay more attention to the informal organization which overlays the formal structure.

A major impetus to this line of thinking came from the Hawthorne studies, and subsequent concern for the informal, human dimension of organizational life is clearly revealed in the work of writers such as McGregor (1960), Argyris (1957, 1960) and Likert (1961, 1967). Implicit in the work of all these writers is a concern for improving organizational communication in a climate of trust, openness and thorough participation of subordinates in decision-making activities. However, less attention than might be expected is given directly to specifying a particular role for communication in increasing organization effectiveness. In a sense these writers all seem to recognize the importance of effective interpersonal organizational communication practices, but they are not particularly explicit concerning the specific elements and relationships involved. Nevertheless, their focus on the interpersonal dimension suggests fruitful areas of research which could help to clarify the relationship of interpersonal communication behavior to other organizational variables.

Simultaneous to the human relations movement has been the development of a behavioral-decision theory perspective on organizations. The key writers in this area include Simon (1945), March and

Simon (1958) and Cyert and March (1963). Central to much of their work is Simon's principle of "bounded rationality" which posits that man has limits to his ability to comprehend his environment, and that consequently we can expect people to operate rationally only within the context of, or relative to, a frame of reference which is determined by the limitations of their knowledge and information processing capabilities (Simon, 1957; March and Simon, 1958).

Thus, these writers do consider communication and the information processing capabilities of managers as key issues in understanding organizational behavior. Communication in this context is seen to play an important role in transmitting procedures to workers and as a tool/mechanism whereby the uncertainty absorption problem within organizations is dealt with. However, their view tends to be somewhat mechanistic in the sense that no attention is given to the individual and interpersonal dynamics that ultimately figure into the communication process.

The more recent writing in organization theory leans towards a systems perspective and views organizations in dynamic interaction with their environment. Whereas traditional approaches toward organizations take a somewhat mechanistic, static view of organizations, current writers see organizations as probabilistic, organic, open systems attempting to develop internal organizational mechanisms to cope with a complex, dynamic environment. Representative of this perspective is the work of Katz and Kahn (1966), Thompson (1967), Weick (1969) and Lawrence and Lorsch (1967).

Implicit in this above perspective is a recognition that communication plays an important linking role in enabling the organization to sense its

environment more accurately and convey information concerning the environment to appropriate information processing points within the organization so that the organization can cope more effectively with the uncertain environmental context within which it operates. Internally, organizational communication helps to further protect the central core processes through formal and more spontaneous channels by which updated information can help the organization to respond to and anticipate the external environment. The importance of roles and role linkages in clarifying organizational relationships and communication processes can be seen to further enable organizations and their members to deal with the generalized uncertainty they face. From this perspective, organizational communication is a source for increasing goal and role clarity over time. Thus, these writers do focus directly in information and communication requirements of organizations, but the linkage to managerial communication behavior as it affects colleagues still remains to be made.
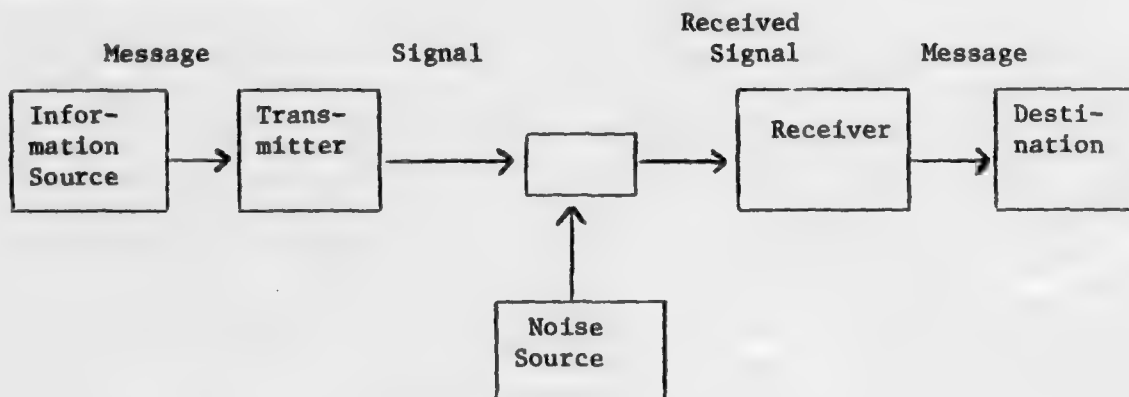
This above very brief sketch of developments in the field of organization theory, while incomplete at best, suggests a pattern in the literature concerning the role of organization communication -- namely, an implicit if not explicit recognition that communication channels and flow are somehow centrally involved in understanding the functioning of organizations. And yet, this same literature for the most part does not directly address organizational communication per se as a fundamental variable for understanding organizational behavior. Hence, we are inclined to agree with Porter and Roberts (1972) that there is relatively little concrete guidance from the organization theory field in developing an appropriate theoretical basis for

viewing communication in organizations.

Communication Models and Perspectives

Turning from the organization theory literature to material more
directly aimed at organizational communication we find that a number of
theoretical models have been proposed to explain the communication process.
We will briefly review some of the major efforts in this area in the
discussion which follows. No attempt is made to provide a comprehensive
review of such models; rather the intent is to highlight some of the
more influential models which have been developed. (A more extensive
review of this area can be found in the work of Thayer (1967); Barnlund
(1968); and Cherry (1966)).

One of the earliest and most influential models comes from work
in the field of telecommunications research (Shannon, 1948; Shannon and
Weaver, 1949). They proposed the following paradigm to describe the
communication process:

This information-processing model has attracted a great deal of
attention by writers in this field, particularly in terms of its poten-
tial for measuring the amount of information transmitted. However, it has
not proven very helpful to researchers concerned with the social-inter-
personal dimension of communication (Porter and Roberts, 1972). In fact,
Chapanis (1971, p. 992) goes so far as to argue that for those interested

in communication in a social context, the literature on communication/
information theory is essentially useless. Miller (1967, p.45) makes
a similar point in noting the neglect by many communications theorists
of the human element involved in any communication system.

Other models, focusing more directly on the interpersonal processes
involved in communication, have also been developed. Dance (1967), for
example, has proposed a helical model of interpersonal communication
which emphasizes that communication while moving forward is also feeding
back on itself and being influenced by its past behavior. Newcomb (1953)
depicts interpersonal communication in terms of a simple model where
Person A transmits something about object X to Person B. Westley and
MacLean (1957) have extended this model in their work on mass communication
by including an additional element 'C' (a filter of sorts) which selects
abstractions of object X which it translates into symbolic form and
transmits via some channel to the receiver (Person B). More complex
models, such as Barnlund's, further delineate various processes such as
decoding, encoding, nonverbal, and behavioral cues which influence the
communication process.

Thayer (1967) adds another dimension to the study of communication
processes by differentiating four levels of analysis for consideration:
technological; sociological; psychological; and physiological. He goes
on to argue that the first two (technological and sociological) have an
impact at the organization level, the sociological and psychological
apply at the interpersonal level, while the psychological and physio-
logical focus on the intrapersonal level. In differentiating these
levels he argues that we need to be careful to recognize that each level

has its own unique set of dynamics and that we must also be prepared to look at the interface of these levels when we study communication in organizations.

Still another orientation is proposed by Morris (1946) who casts the study of communication in terms of a theory of signs and suggests three different sets of issues to be considered: 1) syntactic issues (that is, a focus on the relationships between signs, abstracted from the users); 2) semantic issues (the relationship between signs and the things, actions, relationships and qualities they are meant to represent); 3) pragmatic issues (the relationship between signs and their users).

Although these models and conceptual perspectives provide only a sampling of approaches taken to the study of communication, they demonstrate some of the many alternative ways of carving out a focus of analysis within the broader context of human communication research. In spite of these efforts, however, it seems that we are still a long way from arriving at a theory or conceptual framework that can adequately explain the nature of the communication process, particularly as it functions in organizational settings. Thayer expressed this point of view in 1967 when he said that:

> Perhaps more has been "communicated" about "communication problems" in organizations than any other single topic in the field. Yet this plethora of commentary has not been conducive either to theory building or to theory validation (1967, p. 80).

Unfortunately, this comment remains largely true today, nine years later, despite even more "communication" on the topic since that time.

Empirical Research

Several studies over the last 25 years have empirically investigated

the relationship between communication on the one hand and various measures of performance and satisfaction on the other. Among the early laboratory studies were a series of investigations on the impact of differing communication networks on task performance and morale (Bavelas and Barrett, 1951; Leavitt, 1951; Shaw, 1954, 1964; Mulder, 1960; Lawson, 1965). A common finding was that for simple tasks a restricted or centralized communication net (as, for example, in a wheel shaped network where the central person communicates directly with everyone else, while others communicate only with that central person) was associated with high performance (as measured by speed and accuracy of problem solution) as compared with decentralized unrestricted communication nets (all-channel) where everyone could communicate with everyone else. However, while performance tended to be better in the wheel condition, satisfaction and morale tended to be lower than for the all-channel situation (Leavitt, 1951; Bavelas and Barrett, 1951). With more complex tasks, however, the performance difference between wheel and all-channel tended to disappear. In fact, decentralized nets sometimes outperformed centralized nets (Shaw, 1954, 1956; Lawson, 1965). Meanwhile morale remained higher for the all-channel condition.

Subsequent research (Burgess, 1969; Snadowsky, 1972) provided further clarification on these early findings. In particular, Burgess noted that differences in performance between different communication nets tended to disappear once groups had worked under a given config-uration for a period of time and had attained a steady state--particularly when reinforcement was used. Snadowsky's research suggested that when communication was restricted through authoritarian-led groups, these groups took less time to plan than did unstructured groups. However, the former were less efficient in solving of tasks.

In short, these various laboratory studies suggested that communication nets did appear to differentially affect performance under certain conditions but that over time many of these differences in performance seemed to wash out. However, morale and satisfaction appeared to be rather consistently associated with unrestricted, open communication. The implication for ongoing work organizations would be that increased communication flow is likely to enhance satisfaction and, for more complex task environments, performance as well.

Field research in the area of communication has been fairly extensive, but very little of it has focused on the linkage of communication to measures of performance and satisfaction in work settings. One early exception to this pattern is a study conducted by Indik, Georgopoulos and Seashore (1961) involving 27 stations of a delivery organization. Dependent variable data concerning individual productivity and station productivity were obtained from company records which showed individual and station level performance as a ratio of actual hours worked by individuals to "allowed" hours for assigned work based on time study standards. Individual-effectiveness and station-effectiveness measures were obtained from supervisory ratings of individuals and the stations as a whole. Some 975 nonsupervisory personnel in these 27 stations completed on-site administered questionnaires which focused on four areas of concern: superior-subordinate communication; supervisory supportiveness in relation to subordinates; mutual understanding among organizational members; and the influence of superiors and subordinates on organizational operations. Among other things, the results revealed that at the individual level, and generally in the organization as a whole, a high level of performance was positively associated with

openness of communication between superiors and subordinates.

In another field study, this time involving five hospitals, Julian (1966) obtained results which indicated that a free flow of information/communication was related to effectiveness in hospital organizations using normative sanctions and a low degree of control (regular hospitals), while restricting of information was related to effectiveness in more coercive organization structures (mental hospitals). Additional corroboration of the positive impact of open, free-flowing communication comes from a study by Smith and Brown (1964) in a voluntary organization where the highest correlate of member loyalty was the degree to which information flowed freely.

More recently, Roberts and O'Reilly (1974, 1975, 1976) have been conducting field research which provides considerable support for the communication-performance and communication-satisfaction linkages suggested in the previously cited studies. For example, data from junior enlisted military personnel indicated that overall performance was positively associated with perceptions of accuracy of information received, desire for interaction with others, frequent information summarization, high communication openness, perceived information underload (an implied desire for more information), and frequent expansion of information. Poor performance was associated with high interaction with superiors, frequent and deliberate withholding of useful information, perceived redundancy, and overload of received information. Data from senior enlisted personnel suggested that high performance was positively associated with frequent interaction with superiors and use of written communication, while poor performance was associated with perceptions of

information underload. (Selected findings from Roberts and O'Reilly, 1974).

Elsewhere, O'Reilly and Roberts (1976) reporting on a survey of medical care practices found that supervisor credibility (trust, dynamism and informativeness) was positively correlated with perceived information accuracy and communication openness vis-a-vis one's supervisor. These relationships were strongest when considering interaction within the work unit as a whole, but also held at the individual level of analysis as well. While performance measures were not available for the sample, the implication drawn by the researchers was that better performance could be expected in those medical care practices.

A number of other studies have also examined the issue of accuracy of information flow (Read, 1962; Albaum, 1964; Athanassiades, 1973) but they have not considered the potential impact on performance and satisfaction. For the most part, however, these studies reinforce the importance of communication accuracy and are suggestive of the linkage to increased organizational effectiveness.

As the above review of empirical studies focusing on the communication-performance and communication-satisfaction linkages suggests, the extent of research in this area is relatively limited. However, the basic pattern of findings is quite consistent--namely that open, accurate, free-flowing communication behavior between superiors and subordinates appears to contribute both to performance as well as satisfaction of subordinates and generally to increased organization-wide effectiveness. In the research strategy which follows, this particular linkage between communication on the one hand and satisfaction and performance on the other will be of central concern.

COMMUNICATION MODEL

The basic model and research strategy outlined below focuses
specifically on the manager's communication behavior with colleagues
(subordinates, peers, and superiors) in an organization setting.
Within that context we will be investigating the following general
working hypothesis: that a manager's interpersonal communication
behavior has an important impact on colleagues' attitudes regarding
job/role satisfaction, satisfaction with colleagues in general, and
also influences colleagues' job performance.

While this general working hypothesis might appear to be intuit-
ively quite reasonable to many people, very little research has been
reported which empirically explores this issue. However, our concern
goes beyond this basic hypothesis to an examination of particular
mechanisms which may help to explain the presumed linkages between a
focal manager's communication behavior on the one hand and colleague
attitudes and behavior on the other.* More specifically, the following
model has been formulated (Figure 1) which is based on an extensive
review of the literature on communication, employee performance and
job satisfaction, as well as on preliminary research involving a
sample of 397 industrial managers. As can be seen, this model posits
a set of causal linkages in which a manager's interpersonal communication
style (ICS) - as operationalized by the six ICS variables listed in the
model - is seen to affect subordinates in two important ways. First of all,

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* Hereafter we will use the term "focal manager" to refer to the
particular manager whose communication behavior is the focus of concern,
while his "colleagues" are those persons in his immediate day to day work
environment who constitute his main communication net (subordinates as
well as peers and superiors).

it influences the extent to which colleagues have a clear understanding
of their role responsibilities and relationships (role clarity), which
in turn influences colleague satisfaction with focal person, general
role satisfaction and performance. Secondly, the model suggests that
a manager's communication behavior creates a certain image of manager
credibility in the area of his perceived trustworthiness as a
communicator, his informativeness, and dynamism (as seen by his colleagues),
and this also has an important effect on colleague satisfaction and
performance. A brief review of relevant literature and research
follows which provides a theoretical base for our model and clarifies
the linkages within the model.

Relevant Theoretical Literature

As has already been intimated, the literature on communication theory,
as well as organization theory, has not provided much concrete direction
in the development of operational models which can explain communication
processes in organizations. Nevertheless, a number of themes do emerge
from the literature which provide a context and suggest some of the
linkages being proposed in our model. Of particular interest from this
perspective, especially as it relates to the issue of role clarity in our
model, is the work of Katz and Kahn (1966) and previous research by
Kahn, et al. (1964). These researchers characterize organizations as
systems of roles in which people are tied together in terms of the
functional interdependence of the roles they assume (Katz and Kahn, 1966,
p. 38). The concept of role in this context provides a means for linking
the individual to the organization as a whole and to others within the
organization. In their discussion of the process whereby individuals

assume organizational roles, they distinguish between role sending
and role receiving. A role sender (for example, supervisor) will have
certain role expectations of another person (for example, subordinate)
which he in turn communicates (the sent role) to the focal person.
This focal person perceives the sent role (as his received role) which
subsequently guides his role behavior. Hence, the process of role
taking is seen to involve a number of steps in which possible discrep-
ancies between the original role expectations of the role sender and the
actual role behavior of the focal person can occur. A key element in
this process is the communication which takes place between role sender
and role receiver.

This perspective on the relationship between role expectations and
role behavior thus has direct relevance for the model proposed in our
research strategy. Moreover, there is a fair amount of empirical
research (discussed in more detail later) which supports this role
theoretic view and the linkage to communication behavior and organiza-
tional performance.

An additional source of theoretical support for our model,
especially with regard to the notion of focal manager credibility as
an intervening variable in linking the manager's communication to
colleague outcomes, is the communication literature which addresses
the credibility of information sources and its impact on persuasion and
opinion change. Indirectly related to this perspective is the work of
Hovland, Janis and Kelley (1953) who were concerned with the question
of the credibility of communicators as perceived by the receivers of
communication. Their review of research indicated that low-credibility
communicators were much less effective in bringing about opinion change.

Other research, more immediately focused on work organizations
(Falcione, 1974; O'Reilly and Roberts, 1976), underscores the impor-
tance of source credibility and trust in interpersonal communications.

Recent research on this topic suggests three distinct components
for evaluating the credibility of a communication source: trustworthiness
or safety (which includes a general assessment of the affiliation rela-
tionship between communicator and receiver as perceived by the latter);
informativeness or expertise (which is both context-free as well as
context-relevant in its judgment of the communicator); dynamism (a sort
of potency and activity dimension) (Berlo, Lemert, and Mertz, 1969;
Falcione, 1974). These three factors have been utilized in some recent
research reported by O'Reilly and Roberts (1974) who attempted to get
a measure of general credibility of an organization's information milieu
and its impact on employees.

In applying this concept of communicator "source credibility" to
our model, we are concerned with the impact of a manager's credibility
as an information source on his colleagues. More specifically, this
variable suggests that a colleague forms an impression of the reliability/
credibility of a focal manager based on his (the focal manager's)
communication behavior, and that this "source credibility" image in turn
influences colleague attitudes toward the focal person, role satisfaction,
and affects his performance.

Empirical Research Related to Model

A number of empirical studies have been reported which directly
or indirectly provide support for the several linkages hypothesized in
our model. However, the operational measures utilized in these studies

have varied quite a bit. A brief review of such research follows.

Interpersonal Communication Style (ICS). The impact of a manager's interpersonal communication style on colleague satisfaction and performance has been discussed in many writings, but there are relatively few studies which have empirically investigated this issue. A previously cited field study (Indik, Georgopoulos and Seashore, 1961) and a number of laboratory studies indicate the importance of open, two-way communication. However, other dimensions of managerial interpersonal communication behavior as reflected in the ICS panel of our model have not for the most part been probed in an empirical research sense.

Role Clarity. The importance and impact of role clarity (or its opposite--role ambiguity) on employee attitudes and behavior has been reported in several research studies. Kahn, and others (1964), for example, indicate that role ambiguity is a concern for a substantial percentage of our labor force. Although the causes of role ambiguity for an individual in an organization cannot be entirely attributed to any given focal manager, clearly a manager does have a primary responsibility to define for and with his colleagues (particularly subordinates) specific job and role relationships. Recognition of this responsibility and relationship to supervisory performance is suggested in a survey conducted by Mandell (1956) who found that supervisors rated low in performance were also rated poorly in their ability to issue clear instructions to their subordinates. Elsewhere, Cohen (1959) has reported that ambiguous task definition was associated with a less favorable attitude toward the superior and decreased productivity. Smith (1957) has also found that increased role ambiguity leads to a decrease in problem-solving efficiency.

More recently House and Rizzo (1972) have reported findings which suggest role clarity as an important intervening variable linking independent variables (organization formalization practices and leadership practices) with dependent variable measures of organization effectiveness, employee satisfaction, anxiety/stress, and propensity to leave or stay. This particular study provides some tangential linkages to communication behavior, but it still does not directly measure specific dimensions of communication behavior which may affect role clarity and dependent measures of concern. Another study cited earlier (Indik, Georgopoulos and Seashore, 1961) points to a direct link between open, two-way communication between superior and subordinate on the one hand and with subordinate performance on the other. Increased role clarity would seem to provide a reasonable explanation for the relationship which was observed in this study, although no measure of role clarity was included in that study.

While these various studies mentioned above do not directly test all the role clarity linkages proposed in our model, in combination they do lend support for the notion that role clarity serves as an important intervening variable for understanding the relationship between managerial communication behavior and colleague attitudes and behavior.

Focal Manager Credibility. Evidence of the linkage between focal manager credibility as an information source and communicator on the one hand and colleague (primarily subordinate) performance on the other is suggested in the work of Gibb (1964) who found that lack of trust in information flow causes groups to operate at lower efficiency, while

Friedlander (1970) in a longitudinal study found that trust facilitated group accomplishment. Similarly, Roberts and O'Reilly (1974) reported a relationship between the three aspects of supervisory credibility mentioned above and subordinate job satisfaction.

The linkage between interpersonal communication behavior and the intervening variable of credibility has not been extensively examined in research settings, although there is some preliminary support for this proposed connection. Deutsch (1958) in a series of laboratory experiments, found communication to be a central variable in the development of trust. However, he did not directly examine the specific kinds of communication behaviors which fit into an ongoing organizational setting. In a more general sense, the notion of credibility/trust being based on authentic, open communication has been consistently suggested in the literature on OD as a precursor to improved organizational effectiveness (Argyris, 1962; Likert, 1967). Hence, there is a fair amount of conceptual support for this link in our model.

Operational Measures for Model Elements

In the discussion to this point, we have proposed a model which posits a relationship between managerial communication behavior, intervening variables (role clarity and focal person credibility) and dependent variable measures of colleague satisfaction with focal person, general job/role satisfaction, and performance in a work setting. The operational measures for these variables are derived from previous work done by this researcher as well as from other organization behavior research. These various measures are discussed in some detail below.

Independent Variables (Interpersonal Communication Style)

The development of the six interpersonal communication style variables

has emerged from research effort involving two phases. The initial
task was to identify a range of behaviors which seem to be related
to interpersonal communication (Phase I). The next step was to examine,
refine, and isolate from this broad range of behaviors some specific sets
of behaviors which held promise for further investigation (Phase II).
The particular procedures used in accomplishing these phases are detailed
below.

Phase I consisted of a series of interviews with 13 managers from
three divisions of a large manufacturing organization (Manufacturing,
Research and Development, and Marketing), the purpose of which was to
begin to identify specific behaviors which describe what managers do when
they communicate with others. In these interviews, the investigator
asked each manager to think of someone in the organization whom he
considered to be a highly effective communicator and identify the behav-
iors and characteristics which described this person's style of commu-
nication. After describing the characteristic behaviors of highly
effective communicators, each interviewee was in turn asked to describe
behaviors of someone he considered to be a poor communicator. Behaviors
relating both to sending as well as receiving messages were identified
as part of this process. In addition to these two sets of questions,
the respondents were also asked if they noticed and could identify
differences in effective communication behavior depending on the direc-
tionality of the communication (upward, downward, lateral). However,
the consistent response was that no one behavior could be uniquely
linked to a particular direction of communication.

Most interviews were tape recorded and where this was not possible,
notes were taken during the course of the interview. From these conver-

sations a series of statements were extracted which described behaviors
of good and bad communicators as perceived by the interviewees. These
statements were then reviewed, refined and reduced to a set of 73 items
which captured the range of behaviors which had been identified. Seven-
point scales (ranging from always to never were attached to each item,
using anchor words at each point which have been shown to approximate
equal intervals in ratio judgments of frequency (Bass, Cascio, and O'Connor,
1974). These items plus two effectiveness questions were combined into
one section of a questionnaire labeled "Interpersonal Communication Style"
(ICS) which together with other sets of questions constituted a ques-
tionnaire package which was used in the second phase of the research.

Having derived a set of items which described interpersonal commu-
nication behavior, Phase II of the research involved the distribution of
this questionnaire to over 700 managers in an industrial setting. Of the
719 questionnaires sent out, 397 usable responses were obtained (a 55%
return rate).

The responses to the ICS section were then subjected to a factor
analysis (principal factors) which yielded 12 factors with eigenvalues
of one or greater. These 12 factors accounted for 63% of the total
variance. This set of factors was then rotated (varimax), and six
factors (accounting for 89% of the rotated factor variance) were seen to
be suitable for further investigation.

Each factor was analyzed by first identifying those items which
had high loadings on that factor and at the same time, lower loadings
on other factors. A minimum factor loading cutoff point of .35 was
used to initially isolate the key items on a factor, and the loadings

of these items on other factors were in turn assessed to be sure
that only items which had at least a .10 higher loading on that factor
compared to other factors would be retained. The resulting set of items
on a given factor was then studied in order to develop a term or phrase
which seemed to give appropriate meaning to the construct represented
by that set of items. In this manner key items for each factor were
identified and factors were labeled.

An analysis of factor 1 revealed six items above the .35 cutoff
and four of these had factor loadings of more than .50. These items all
focused on the idea of careful organization of thoughts and choice of
words when communicating with others (e.g., chooses words carefully;
organizes thoughts before speaking, etc.). Accordingly, this factor
was labeled careful presentation.

Factor 2 contained 20 items with loadings of .35 or above, of which
13 loaded .50 or more on the factor. Looking at the 13 items with highest
factor loadings, the notion of an open, free flow of two-way communication
(e.g., asking for other peoples' views, giving feedback) emerged very
strongly and thus this factor was labeled open, two-way communication.

In analyzing factor 3, nine items were identified and six of these
had factor loadings of .50 or more. The items pertained to a frank,
levelling, self-assured communicating style (e.g., he says what he thinks
without mincing words; he levels with others), and the factor was
accordingly labeled frankness.

Factor 4 yielded 8 items of which three loaded .50 or more on the
factor. The items related to communicator attentiveness in listening to
others (e.g., he keeps his mind on what the speaker is saying; lets me

finish my point before he comments, etc.), and the factor was thus labeled careful listening.

Nine items loaded heavily on factor 5 (5 had .50 or more factor loadings), and they consistently referred to the notion of wordiness or lack of brevity (e.g., he tends to run off at the mouth; he drifts from topic to topic; takes a lot of words to say something which could be said in a few words). This factor was, therefore, labeled brevity.

Factor 6 yielded three key items, all of which focused on the notion of natural, relaxed informality in communicating with others (e.g., he's very informal and relaxed with others). Hence, this factor was called informality.

Having identified these six factors and the key items on each factor, the internal consistency scale reliability for each factor was then calculated. As part of this process, items were dropped when they no longer contributed to increasing the scale-reliability or when a .85 scale reliability on a factor was reached. The items were also correlated with item total (factor) scores of the other factors, and where an item correlated higher with a factor score other than its own factor, it was dropped from that scale. This process yielded a set of 25 items for a shortened questionnaire instrument in which the six scales had reliabilities of .76 and above. An additional analysis to examine the retest reliability of these scales was generally quite satisfactory. The test-retest correlation coefficients for a sample of 36 respondents (administered one week apart) were all significant ($p < .01$) and ranged from .36 (informality) to .85 (careful presentation).

It should be noted that the factors which emerged from this research find some support in the literature which exists on the topic of communication, although most of the writing is not based on field-oriented empirically based research. Factor 1, for example, refers to a principle sometimes cited in material on effective speaking which emphasizes the necessity of carefully organizing one's thoughts in order to transmit information to others. In this connection, Petrie (1963) has concluded on the basis of a review of existing literature that messages which are well-organized lead to better comprehension and retention on the part of the receiver. He admits, however, that there is surprisingly little direct research to substantiate this principle.

The notion of open, two-way communication (factor 2) has also been referred to in the literature on occasion. Some of the small group communication research, for example, indicates that an all channel condition of communication in complex problem-solving situations typically leads to better solutions (e.g., Shaw, 1964; Bavelas, 1950). Elsewhere, Burke (1969) argues that "the key to effective communication on the part of a speaker, then, is to obtain some feedback, of one form or another, from his listener(s)." However, he cites no empirical support for this statement.

Frankness (factor 3) fits in with the literature on conflict management which stresses the value of surfacing differing, conflicting points of view in order to yield better decisions and solutions to organizational problems. The notion of attentive listening (factor 4) is consistent with the concern expressed by Rogers (1967) and others that empathetic listening is a key to effective interpersonal communication.

The effects of brevity (factor 5) have not been dealt with empirically to any great extent, although intuition and articles on principles of effective speaking clearly suggest that brief, directed comments are much more preferable than long-winded statements. The relationships of informality (factor 6) to interpersonal communication effectiveness seems logical to the extent that informality increases a readiness to deal openly and honestly with others, although once again little direct research in this area has been reported.

Intervening Variables

Role clarity is measured with a scale developed by Rizzo, House and Lirtzman (1970). The reliability of the six-item scale is .80. As originally used by the above researchers, role clarity was defined "in terms of (1) the predictability of the outcome or responses to one's behavior, and (2) the existence or clarity of behavioral requirement . . ." In developing their scale via factor analysis, however, the items hanging together most clearly were those concerned with the latter dimension.

Source credibility, as indicated earlier, can be viewed in terms of three separate dimensions: trustworthiness, informativeness, and dynamism. The scales used here are derived from the factor analytic work of Berlo, Lemert, and Mertz (1969) as well as Falcione (1974), and they include a total of 20 items which ask the respondent to indicate the extent to which the statements describe his own perspective of his supervisor.

Dependent Variables

One of the immediate questions which arises concerning organizational communication is its relationship to employee satisfaction with the work situation in general. Two dependent variable measures are being utilized

to explore this issue. The first measure focuses on colleague satis-
faction with focal persons. The items for this scale are derived from
a satisfaction-with-supervision scale with a reliability of .89 (Bass and
Valenzi, 1974). The measure of general job/role satisfaction is also
taken from a job satisfaction scale developed by Bass and Valenzi (1974)
which has a reported scale of reliability of .90.

Apart from these two measures of satisfaction, we are also utilizing
a measure of work unit performance with a reported reliability of .95
(Bass and Valenzi, 1974). Recent research (Solomon, 1975) indicates
that this scale has reasonably high convergent validity with objective,
independently gathered measures of performance.

SUMMARY

This report reviews the background and empirical research leading to
the development of a 13-factor communications impact model. In subsequent
reports, we will describe how this model can be trimmed to increase its
parsimony of explanation as well as how the factors and their links are
affected by exogeneous variables such as the time respondent colleagues
of focal persons have spent working with the focal persons and how close
physically their offices or workplaces are located.

MODEL REPRESENTING IMPACT OF FOCAL MANAGER'S INTERPERSONAL

COMMUNICATION STYLE ON COLLEAGUES

Focal Manager's
Interpersonal
Communication
Style (ICS)

Careful Presentation
- - - - - -
Open, 2 Way Communication
- - - - - -
Frankness
- - - - - -
Careful Listening
- - - - - -
Brevity
- - - - - -
Informality

Internalized
Effect
on Colleague

Colleague
Role Clarity

Focal Manager
Credibility
-trustworthiness
-informativeness
-dynamism

Colleague
Outcomes

Work Unit Performance

Colleague General Role/
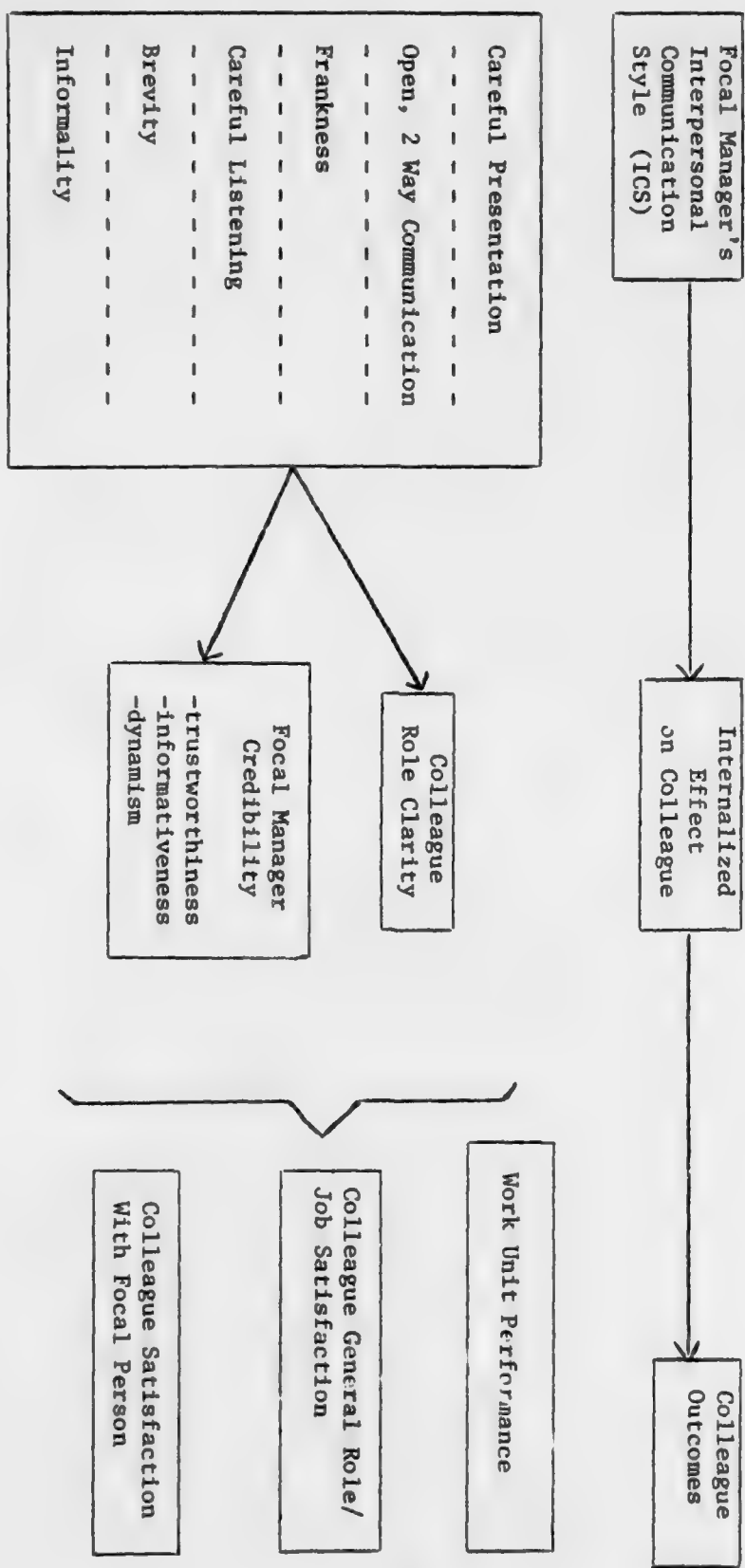Job Satisfaction

Colleague Satisfaction
With Focal Person

FIGURE 1

34

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